MINUTES OF THE BOARD OF WATER COMMISSIONERS REGULAR MEETING – JANUARY 21, 2020

Present: Chairwoman Elizabeth Phelan, Commissioner Robert A. Badal, Commissioner Ramiro Suarez, Commissioner Sean Dunn, and Council Liaison Mary Fortier

Staff Present: Superintendent Robert Longo, Assistant Superintendent Michael Lynch, Assistant Superintendent Joseph Pagliaruli, and Assistant Superintendent Dan Bolduc

Absent: Commissioner Kathy Ferrier

Chairwoman Phelan called the meeting of the Board of Water Commissioners held at the Water Treatment Plant, 1080 Terryville Ave to order at 6:30 p.m.

1) PLEDGE OF ALLEGIANCE

2) MOMENT OF SILENCE

Commissioner Suarez dedicated a moment of silence for all wildlife in Australia that are dealing with the wild fires, as well as, the fire fighters and the environmental impact that is going on there.

3) APPROVAL OF THE MINUTES OF THE DECEMBER 17, 2019 REGULAR MEETING OF THE BOARD OF WATER COMMISSIONERS

On motion of Commissioner Badal and seconded, unanimously voted: To approve the minutes of the regular Board of Water Commissioners meeting on December 17, 2019.

4) APPROVAL OF THE DEPARTMENT REPORTS FOR THE MONTH OF DECEMBER 2019

On motion of Commissioner Suarez and seconded, unanimously voted: To approve the Bristol Water Departments monthly report for December 2019.

5) PUBLIC PARTICIPATION

None

Chairwoman Phelan requested Agenda Item 8 Connwood Forestry 2020/21 Watershed Forest Management Program be moved up before Agenda Item 6.

On motion by Commissioner Dunn and seconded, unanimously voted to move Agenda Item 8 before Agenda Item 6.

8) CONNWOOD FORESTERS, INC. – PROPOSAL FOR 2020/21 WATERSHED FOREST MANAGEMENT PROGRAM

David Beers, Connwood Foresters gave a brief over of the past three years harvesting and the proposal for 2020 (see Attachment A). During the presentation, he noted that having another access to the harvest area would make the wood more valuable. He suggested that he could reach out to the landowner that abuts the Bristol Water Department property to get permission to cross their land. A discussion ensued, Superintendent Longo recommended that Mr. Beers contact the landowner but not offer any monetary payment.

On motion of Commissioner Dunn and seconded, unanimously voted to accept Connwood Foresters 2020/21 Proposal Watershed Forest Management Activities as referred in their proposal. Allow Connwood to negotiate for an improved access for the cutting in the 2020 Program.

6) CUSTOMER COMPLAINTS

None

7) COMMITTEE REPORTS

A) CELL TOWER COMMITTEE

Superintendent Longo reported that AT&T's final offer was \$4,000. He noted they indicated they are going to look into other venues.

B) LEVEL A MAPPING

Nothing to report at this time.

9) INVESTMENTS

Superintendent Longo reported the investments are still under review.

10)WATER & SEWER MERGER

Superintendent Longo reported he is working on establishing the Sewer Commission, sewer budget and sewer ordinances.

Superintendent Longo noted he has met with Munis to move the sewer department's financials over to Bristol Water Department and explained the ways it could be done for July 2020.

Superintendent Longo reported that he has met with all outside employees from both departments explained the new changes and the departments structure.

A discussion ensued to the savings by combining the departments. No action was taken.

11)ACTIVITY REPORT - WESTON & SAMPSON ENGINEERING

Superintendent Longo gave a summary on Weston & Sampson's Activity Report (See Attachment B).

12) CHAIRWOMAN'S REPORT

Chairwoman Phelan thanked Superintendent Longo for an email she received regarding a report from Tighe & Bond on statistics of water rates. She noted that Bristol ranked at the bottom for lowest rate. This report also noted how other water utilities are moving toward monthly billing. Superintendent Longo noted he has reached out to Tighe & Bond seeking permission to attach their report to the Bristol Water Department's website.

Assistant Superintendent Dan Bolduc reported the Treatment Plant will be installing new turbidity meters and a new spectrometer. He also stated that they will be replacing 24" butterfly valves.

Assistant Superintendent Lynch reported the construction division has been busy with outside work since the weather has been warmer than normal. He also noted they are busy with water main brakes and service line breaks. He also reported that he has been short two guys, one of which took a position at the treatment plant.

Assistant Superintendent Pagliaruli noted the Meter Shop is also down a few employees due to injuries, but they continue to work on light duty. The meter shop has been experiencing frozen meter calls as well as pipes freezing in vacant homes. He noted they continue to do cross connection inspection and meter changes.

Superintendent Longo reported the office staff is working on cleaning up the office and moving files around. He noted that in the budget is an item for renovations that will be used to make room for the new Sewer Inspector position.

13) SUPERINTENDENT'S REPORT

Superintendent Longo informed the Board the ATCAVE Conference will be held on the last Tuesday in February at the Aqua Turf.

Superintendent Longo reported the Department will move over to Kronos, which is an electronic time card system. He noted the City has been using Kronos for some time and why Department was the last to switch over. He explained how Kronos works and that it should be working by the end of March. He also noted that employees who receive direct deposits will no longer be getting paper check stubs. The check stubs will now be sent via email.

Superintendent Longo noted the Department tested for PFAS at all its sources. The results all came back non-detected except for 2 areas, which came back slightly over non-detected. The Department can say there is no PFAS in our water source and would like to hold a public information session in late April. He has asked Weston & Sampson to give a proposal for them to be at the session to explain what PFAS is, how it gets into the environment, what the Departments results are, and

what that means. He also noted that they have tested the New Britain water connection and are waiting for results.

Superintendent Longo reported that the Stream Flow Regulation is in effect. He explained how it came about and what it means to the Department. He noted that the Department will have to hire an engineer to help comply with the stream flow regulation. The Department will have 6 /12 years to come up with a plan and have it working within 8 years. He noted that he believed the Department would not have to release from Reservoirs 2, 4 & 5 and has Weston & Sampson looking into it. In speaking with DPH, they recommended that the Department think about resurrecting Cooks Dam. Superintendent Longo noted he found that the Department has on the book a Reservoir 6 that was proposed in 1934. In 1943, construction designs were found. He noted that Reservoir 6 has a diversion permit since the 40's which could yield 3.9 million gallons and Cook Dam does not have a diversion permit. A discussion continued to Reservoir 6. Superintendent Longo noted he will be putting in the upcoming budget a line item to hire an engineer to help comply with the stream flow regulation as well as to explore Reservoir 6.

14)OLD BUSINESS

Superintendent Longo reported the Department will be presenting the department's budget to the Finance Committee on March 24th at 5:30 PM. He will be setting up a workshop with the Commissioners early March to go over both water and sewer budgets. He noted that Mayor would like to see a zero percent increase.

15)NEW BUSINESS

None

16)ADJOURNMENT

At 7:44 p.m., on motion of Commissioner Badal and seconded, it was unanimously voted to adjourn.

ATTEST:

Renee LaMarre

Administrative Assistant/Accountant

39 CHERRY HILL ROAD, PO BOX 150 ROCKFALL, CONNECTICUT 06481 860-349-9910 CONNWOOD.COM

A FOREST OWNERS' COOPERATIVE ASSOCIATION ENGAGED SINCE 1945 IN THE STEWARDSHIP OF FORESTS FOR WOOD, WATER, WILDLIFE, RECREATION, AND ABSTHETICS.

Summary of Bristol Water Department Forestry Activities Since 2016 Plan Renewal

Year	Stands	Туре	Acres	MBF	Revenue^	Status	TSI Stands	Acres	Cost	Status
2017	CD2,3,8,1995	Improvement Harvest	70	207	\$16,900	Sold	CD9	38	\$2500	Marked
2018	CD 5,6,7	Improvement Harvest	110	235	\$91,664	Cut	R3	6	\$500	Cut
2019	W1996	Shelterwood	58	136	\$40,120	Sold	R2	15	\$1000	Marked
2020	CD 1, 4, 1999	IH/Shelterwood	80	200	\$20,000		E5	15	\$1000	
2021	R1999,2004	Thinning	40	150	\$10,800					
2022	E1998	Shelterwood	39	78	\$7,800		-			
2023	W6, 1995	Thinning	52	160	\$15,160					
2024	S1998	Shelterwood	60	120	\$8,400					
2025	N1996	Thinning	45	90	\$9,000					
2026	W2003 *	Thinning	45	90	\$9,000					

Stand	Young Forest Activity	Acres	Year	Status
4W	TSI - release sugar maple	4	2019	Marke
7	TSI - release white pine crop trees	7	2019	Marke
34	TSI - release sugar maple	4	2019	Marke
19	TSI - release oak and white pine	10	2020	1
11S	TSI - release oak and sugar maple	11	2021	1
	Intensive vine cutting	3	2021	
4	TSI - release white pine and oak and thin spruce and pine	4	2022	
	Intensive vine cutting	4	2022	
34	Improvement harvest – Combine with Stand 1998 Harvest	8	2022	
67	Intensive vine and invasive cutting	8	2023	
10	TSI - release red oak, sugar maple and white pine	10	2024	
43	TSI - Release oak and white pine	14	2025	
 .	Intensive vine cutting	5	2025	
86	TSI - release oak and sugar maple	10	2026	

[^]Bold is received revenue

^{*} Moved to end of schedule due to dead ash trees

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Bristol Water Department Proposal for 2020/21 Watershed Forest Management Program

Commercial Timber Harvest Operations

For all projects that involve the sale of commercial forest products, CFI will handle on behalf of Bristol all aspects of timber sale preparation and oversight including the following services:

- 1. Confirm the location of previously marked and located property boundary lines;
- 2. Determine cutting area boundaries, access routes to reach the timber to be harvested and locations for loading logs onto trucks ("landings");
- 3. Locate and designate with flagging main "skid roads" (trails in the forest used to haul logs from the stump to the loading location), stream crossings and wetland crossings;
- 4. Obtain any required permits, and coordinate activities with local and state officials;
- 5. Select and designate with paint trees to be harvested (CFI will tally each tree marked to facilitate an estimate of the amount of useable wood material and its value);
- 6. Summarize the information gathered during the sale preparation, notify reputable buyers, and "show" the sale to potential purchasers:
- 7. Work with Bristol Water Department (BWD) to develop a sales agreement that protects BWD and the forest;
- 8. Solicit bids and help BWD select the successful purchaser;
- 9. Ensure that the purchaser posts a cash performance bond, has the required insurance, and makes payments according to the schedule specified in the contract;
- 10. Monitor the ongoing logging operation to ensure compliance with the terms of the contract;
- 11. Keep BWD informed about the status of the project, and notify BWD when the job has been completed.

The estimated cost specified for commercial timber harvest projects will include Connwood's time to prepare one application and attend one inland wetland or zoning meeting for each required permit. The Bristol Water Department will be responsible for any permit application fees or performance bonds associated with the permits. If Connwood's attendance is required at more than one meeting per permit or permits other than inland wetlands or zoning are necessary, CFI will bill Bristol at the hourly rate specified below. Therefore, the total cost for the project may exceed the estimated expenses stated below.

The cost for Connwood's services will be billed on a time-and-material basis. The applicable hourly rates will be \$60.00 for professional forestry services and \$50.00 for technical services. Transportation will be charged at the federal rate and material used by CFI (e.g. tree marking paint) will be billed at standard rates. Transportation mileage and time is charged round-trip from our Rockfall Office. In some cases, the costs in this proposal differ from those listed in the 2016 Management Plan. The revised costs reflect changes in the scope of services to be provided.

Under certain circumstances, some of which are listed below, forest management projects may require work that was not foreseen during the writing of the BWD Forest Management Plans. Examples of such circumstances include:

- 1. Compliance with existing or future state or Federal regulations or statutes may require unforeseen work. For example, the Connecticut Forest Practices Act (when enacted) will require registration of timber harvests with the Division of Forestry. Additionally, local wetland and zoning regulations change continually.
- 2. Public relations services, such as providing information to reporters, may be required for some projects.
- 3. Wetland and zoning permits for commercial timber harvesting operations may require CFI's presence at several meetings and/or application fees.
- 4. Timber buyers occasionally renege on commercial timber harvest contracts, even after making one or more payments. When this occurs, CFI must spend additional time to market the sale to a different buyer.
- 5. Unusual problems, such as equipment failures, may arise during the harvesting of commercial timber sales. CFI should spend extra time supervising these situations to ensure that the terms of the timber sale contract are upheld.
- 6. Other circumstances, which were not anticipated but should be addressed, may arise.

Additional work that is required to complete a project as a result of one of these considerations will be billed at the rates for time and materials stated above. The additional work may cause the total cost of the project to exceed the estimated amounts. In all such cases CFI will obtain appropriate approval from BWD prior to undertaking the additional work.

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A FOREST OWNERS' COOPERATIVE ASSOCIATION ENGAGED SINCE 1945 IN THE STEWARDSHIP OF FORESTS FOR WOOD, WATER, WILDLIFE, RECREATION, AND AESTHETICS.

2020 Proposed Forest Management Activities - Please refer to attached maps

2020 Timber Harvest: CD 1, 4, 1999: ~80 acres of commercial operations in Harwinton. There are two possible landings. One is an existing landing on Woodchuck Lane that is currently reserved for use by the 2017 harvest. The other potential landing is on a neighbor's property on Town Line Road in New Hartford. We would need to negotiate an easement with this landowner to create a landing here.* It is a good landing site with dry flat ground and good road sight lines. It is 3000' to the Woodchuck Land landing and 300' to the Town Line Road landing.

In the plan, an improvement harvest is recommended for stands 1 and 4 that will remove poor-quality/unhealthy trees (sawtimber and cordwood) to favor the healthiest and most vigorous trees. I added Stand 1999 since we will likely not bother to return to this area for many decades and it has some monster pine trees that will not keep their timber value much longer. Any ash trees will be salvage harvested in anticipation of its likely demise. There are some big ash trees in Stand 1999. This harvest will remove approximately 200,000 boardfeet on about 80 acres.

*You may want to consider applying for a CT DEEP Watershed Land Acquisition Grant to buy land here for permanent access to the Cooks Dam property.

Estimated Gross Revenue: \$10,000 - \$25,000

Budget: \$7,500 - \$10,000 (\$60/h)

Annual Harvest Planning:

Town hall research for access, boundaries and neighbors. Walk management areas and meet with BWD staff regarding potential issues for future work.

Estimated Gross Revenue: \$0

Budget: \$800-\$1000 (\$60/h)

2020 Pre-commercial Young Tree Thinning (TSI): E5: 15 acres of non-commercial operations in Bristol at Reservoir #7.

This pre-commercial thinning of young trees will release desirable crop trees from crown competition. This will be done by cutting down the unwanted trees around the well-formed trees to give them more light and space to grow more vigorously and thereby improving overall forest health. Many of the trees to be cut down are weevilled pines. Any vines will be cut.

Estimated Gross Revenue: \$0

Budget: \$800-\$1200 (\$50/h) - marking only

2020 Pre-commercial Young Tree Thinning (TSI): 19: 10 acres of non-commercial operations in former Red Pine Plantations – See the 2018 Young Forest Evaluation Report.

This pre-commercial thinning of young trees will release desirable crop trees from crown competition. This will be done by cutting down the unwanted trees around the crop trees to give them more light and space to grow more vigorously and thereby improving overall forest health. Any vines will be cut.

Estimated Gross Revenue: \$0

Budget: \$700-\$1000 (\$50/h) - marking only

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A Forest Owners' Cooperative Association Engaged Since 1945 in the Stewardship of Forests for Wood, Water, Wildlife, Recreation, and Absthetics.

2021 Proposed Forest Management Activities - Please refer to attached maps

2021 Timber Harvest: R1999 & R2004: Most of this area was last harvested in 1999. ~40 acres of commercial operations in Plymouth to one landing.

In the plan, a thinning improvement harvest is recommended for this white pine stand that will remove poorquality/unhealthy trees (sawtimber and cordwood) to favor the healthiest and most vigorous trees and to provide sunlight for tree regeneration on the forest floor. This harvest will remove approximately 150,000 boardfeet on about 40 acres.

For environmental reasons, the landing is being kept out of the fenced area around Reservoir 1. The 19 acres within the chain-link fencing is near two reservoir feeder streams. These streams are fed by underground pipes bringing in water from the upper reservoirs. We may want to consider extra environmental precautions for the 19-acre harvest area.

Due to a poor oak market, this harvest was moved from 2025 to 2021. This will delay selling oak until (hopefully) the oak market improves.

Estimated Gross Revenue: \$10,000 - \$15,000 Budget: \$5,000 - \$7,000 (\$60/h)

Annual Harvest Planning:

Town hall research for access, boundaries and neighbors. Walk management areas and meet with BWD staff regarding potential issues for future work.

Estimated Gross Revenue: \$0

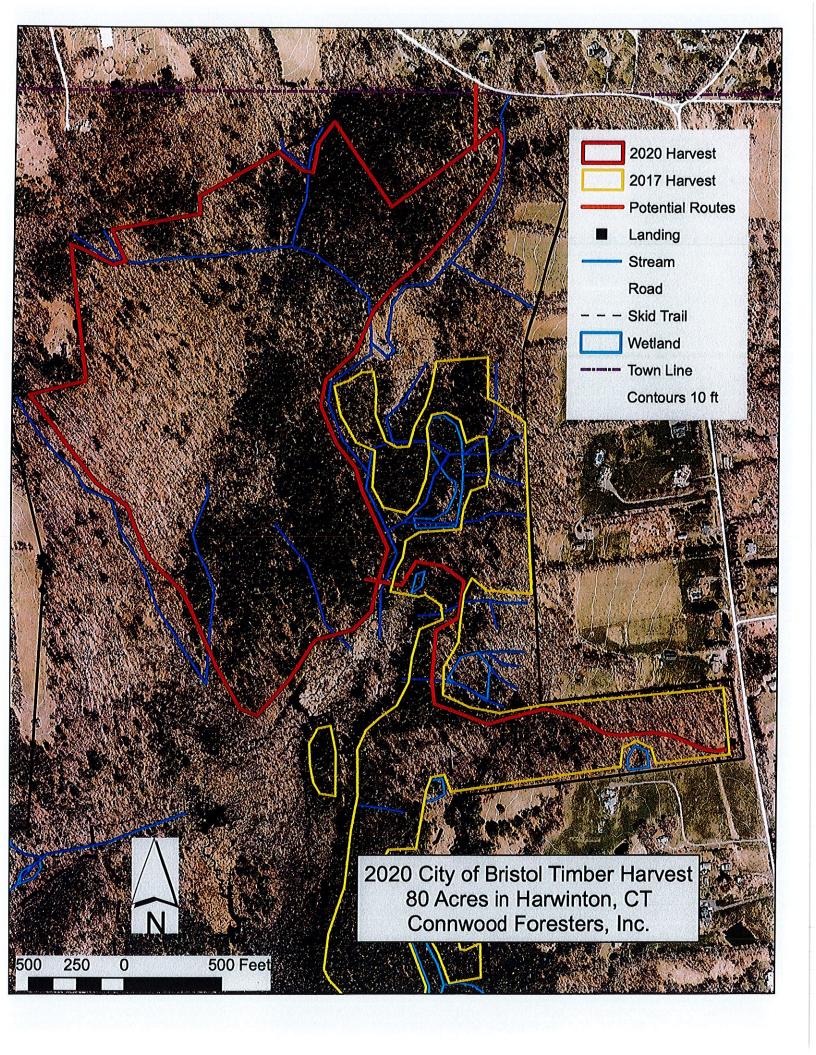
Budget: \$800-\$1000 (\$60/h)

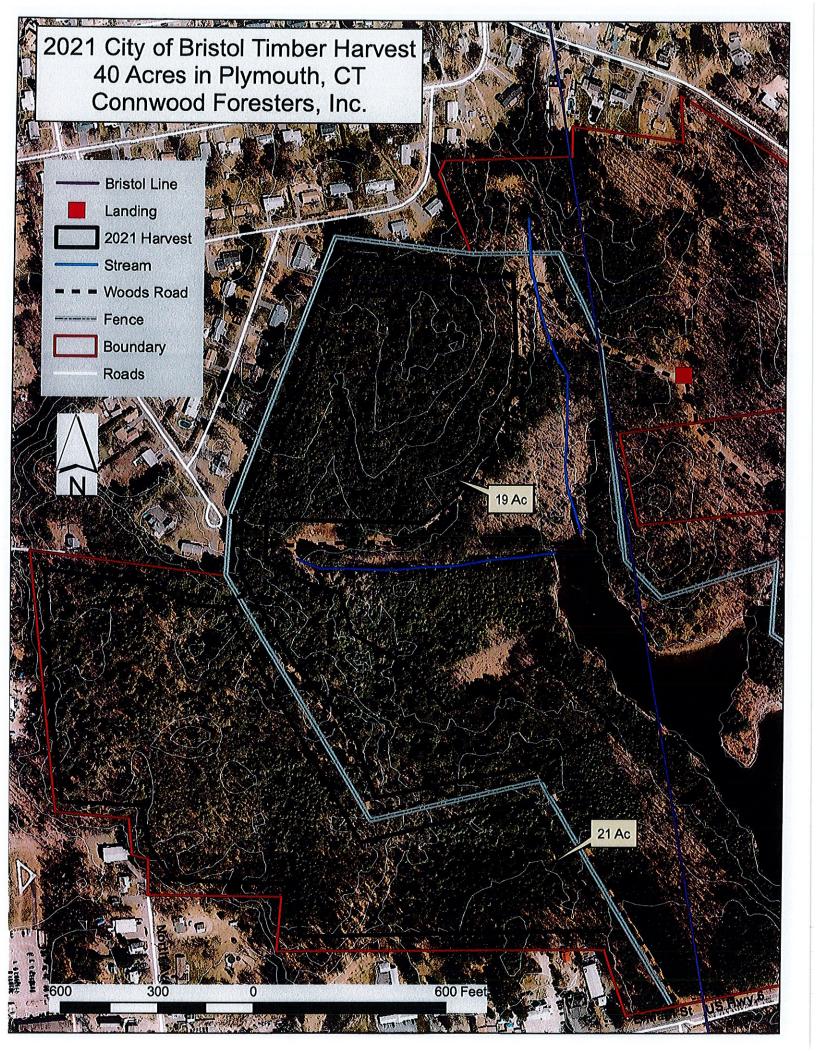
2021 Pre-commercial Young Tree Thinning (TSI): 11S: 11 acres of non-commercial operations in former Red Pine Plantations – See the 2018 Young Forest Evaluation Report.

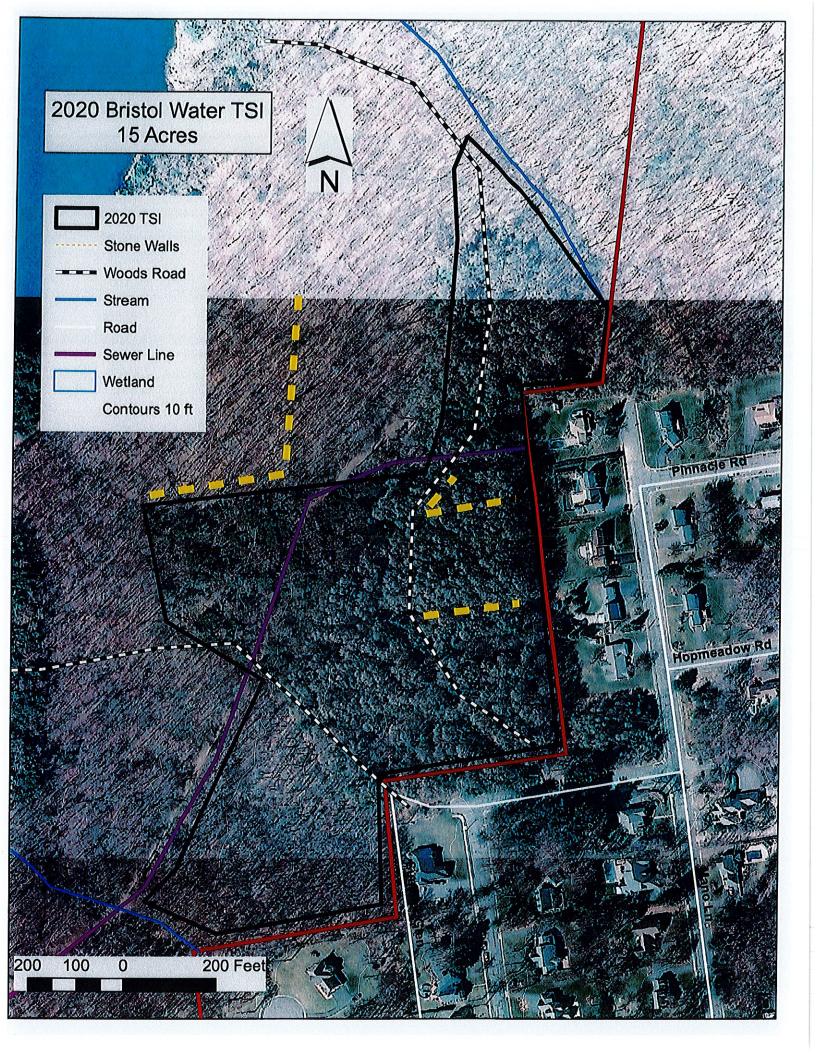
This pre-commercial thinning of young trees will release desirable crop trees from crown competition. This will be done by cutting down the unwanted trees around the crop trees to give them more light and space to grow more vigorously and thereby improving overall forest health. Any vines will be cut. There will be 3 acres of intensive vine cutting – see map.

Estimated Gross Revenue: \$0

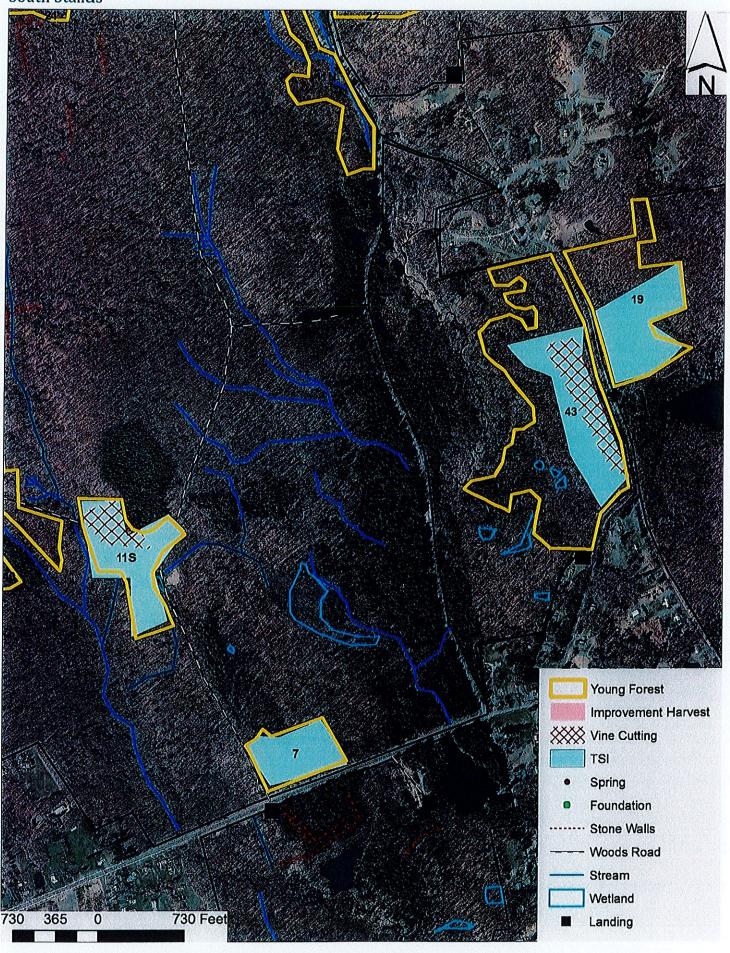
Budget: \$700-\$1000 (\$50/h) - marking only







South Stands



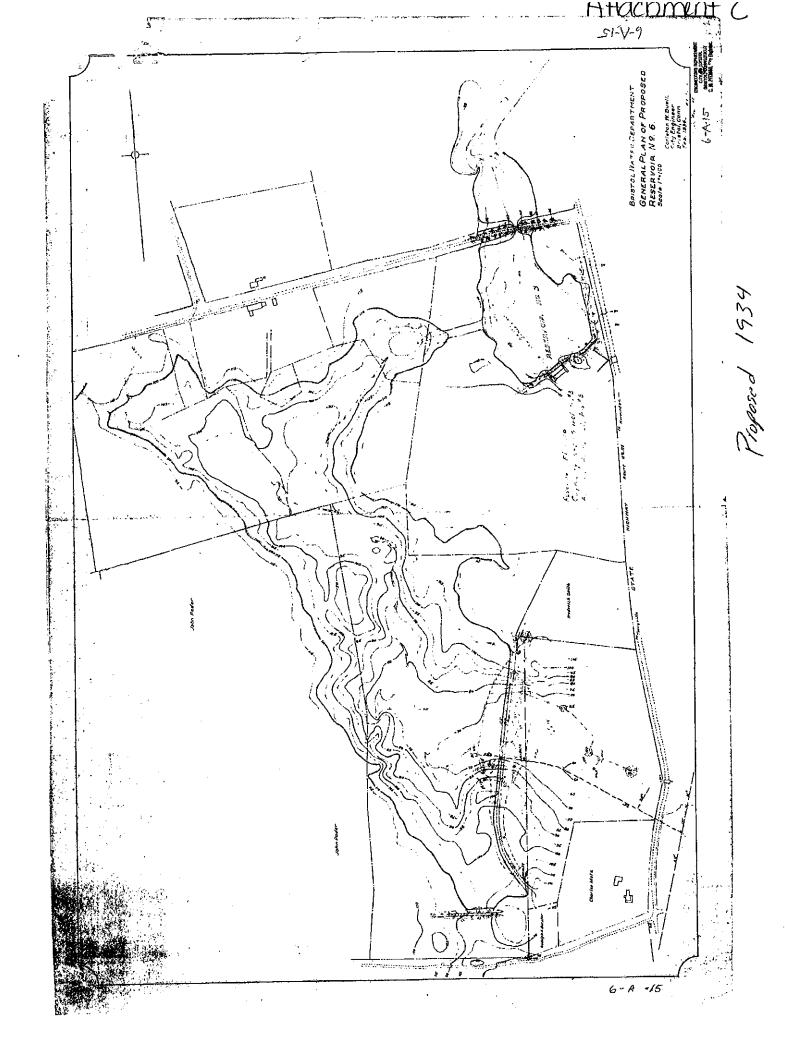


273 Dividend Road, Rocky Hill, CT 06067 Tel: 860.513.1473

WESTON & SAMPSON ACTIVITY REPORT CITY OF BRISTOL WATER DEPARTMENT For the meeting on January 21, 2020

On-Call Engineering Services (2070524):

- Weston & Sampson is currently working on the following tasks:
 - a. CTDEEP General Permits: All Permit application have been submitted to DEEP:
 - i. Miscellaneous Discharges of Sewer Compatible (MISC) Wastewater for the discharge from the WFP to the sanitary sewer.
 - 1. Responded to DEEP comments. Received draft approval letter for the permit.
 - b. G/S: Anticipate locating / surveying unburied valve box covers. Awaiting direction from BWD.
 - c. Water Supply Plan Update: No activity this period. Awaiting letter from DPH.
 - d. Groundwater Under the Direct Influence of a Surface Water (Mix Street Well #3):
 - i. Assisting the BWD with performing a GWUDI study of Well #3. Met with BWD to discuss data. BWD staff collecting required water quality samples and submitting same to the laboratory for analysis. Results are forwarded to Weston & Sampson for monitoring and compilation into the report. The GWUDI study will involve sample collection for a one-year period. Data collection continues as planned. Approximately 10 weeks remain.
 - e. Mix Street and Mechanic Street infrastructure improvements (2190087):
 - i. Construction of water main along access road to Mix Street chemical feed building is complete. Obtained Project Closure documentation from DPH
 - ii. Developed draft design drawings for water main installation at Mechanic Street to support DPH application related to achieving 4-log virus inactivation. Developed details for redirecting analytical instrumentation discharge back into the distribution system piping. Reviewing pipe size alternatives.
 - f. CTDEEP Water Diversion and Streamflow Reporting Requirements:
 - i. Assisting the BWD with the new CTDEEP requirement related to the collection of daily operation data (diversion / duration) for all thirteen (13) registered diversions, beginning January 1, 2020, and preparing an Initial Reporting Form for each dam, due February 28, 2020.
 - g. PFAS Public Awareness:
 - Developed a technical memorandum summarizing the emerging concern of PFAS in drinking water and outlining proposed actions to increase public awareness for the City of Bristol.



Design Plans 1943

01-4-0

SHEET I OF II SHEETS

List from CTDEEP Website 1-21-20

LIST OF REGISTERED WATER DIVERSIONS. LIST DATE 3-22-2017 FOR MORE INFORMATION CALL 860-424-3704

REGISTRANT NAME	NAME OF DIVERSION	REG WD (mgd)	REGISTRATION NUMBER	TOWN	BASIN	Consumptive?	Specific REG STATUS
BRISTOL WATER DEPT	BARLOWE ST WELL #1	08'0	0.30 4315-003-PWS-GR	BRISTOL	4315	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	BRISTOL RESERVOIR #1 (& Cranberry Bog)	00'.	00 4315-004-PWS-IM	BRISTOL	4315	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	BRISTOL RESERVOIR #2	8.40	8.40 4313-003-PWS-IM	HARWINTON	4313	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	BRISTOL RESERVOIR #3	00'6	9.00 4313-004-PWS-IM	PLYMOUTH	4313	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	BRISTOL RESERVOIR #4	39.00	30 4313-005-PWS-IM	HARWINTON	4313	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	BRISTOL RESERVOIR #5	00'26	97.00 4313-006-PWS-IM	HARWINTON	4313	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	BRISTOL RESERVOIR #6 (Poland Brook)	3.90	3.90 4313-007-PWS-RI	HARWINTON	4313	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	BRISTOL RESERVOIR #7 Old Marsh Pond	7.20	7.20 4313-008-PWS-IM	BRISTOL	4313	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	CAMP STREET INTERCONNECTION	0.00	0.00 4315-009-PWS-TR	BRISTOL	4315	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	MECHANIC ST WELL #2	0.00		BRISTOL	4314	TRUE	TRUE ABANDONED SOURCE, REPLACED
BRISTOL WATER DEPT	MECHANIC STREET WEL #2A	1.56	1.56 4314-003-PWS-GR	BRISTOL	4314	TRUE	TRUE REGISTERED, REPLACEMENT WELL
BRISTOL WATER DEPT	MIX STREET WELL #3	0.72	0.72 4314-004-PWS-GR	BRISTOL	4314	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	MIX STREET WELL #4	0.86	0.86 4314-005-PWS-GR	BRISTOL	4314	TRUE	TRUE REGISTERED
BRISTOL WATER DEPT	MIX STREET WELL #5	0.72	0.72 4314-006-PWS-GR	BRISTOL	4314	TRUE	TRUE REGISTERED

Pictures Taken at Reservoir #6 January 15, 2020

